

**METHOD FOR FABRICATING A METAL-CLAD SUPERCONDUCTIVE
BODY, AND ARTICLE COMPRISING BODY**

Abstract of the Disclosure

- It was discovered that metals useful for cuprate superconductor wires and ribbons, such as Ag, Cu, and Au, are not necessarily desirable for magnesium boride superconductor bodies, since such elements tend to react with Mg and thereby deteriorate the properties of the superconducting MgB_2 . The invention relates to techniques and materials that provide useful MgB_2 superconducting bodies. The invention relates to a method for forming a MgB_2 superconducting body, involving providing an intermediate body of a metal cladding; superconducting material or precursor material for superconducting material; and, optionally, a diffusion barrier (depending on the type of metal cladding); performing a cross-section reducing operation on the intermediate body, to provide an elongate body; and performing a heat treatment of the elongate body, to obtain desired properties from the superconducting material (and to also form the superconducting MgB_2 material when precursor material is used).